IN THE CLAIMS

Please amend the claims as follows:

1. (Original) A proteinoid microsphere comprising a mixture of amino acids that are thermally condensed and crosslinked with a crosslinker that can form a pore upon exposure to a reducing agent.

2. (Original) A proteinoid microsphere comprising a mixture of amino acids that are thermally condensed and crosslinked with a crosslinker of any one of formulae I-VI.

COOH— S—S— $(CH_2)_n$—S—S—COOH	I
COOH— S—S— X—S—S—COOH	II
NH_2— S—S— $(CH_2)_n$—S—S— NH_2	III
NH_2— S—S— X—S—S— NH_2	IV
Aryl — S—S— $(CH_2)_n$—S—S—Aryl	V
Aryl — S—S— X—S—S—Aryl	VI

wherein:

X is a spacer group of about approximately 3 to 100 angstroms by about 2 to 30 angstroms that comprises an alkane chain, an alkene chain, a cycloalkyl or aryl ring having five to fourteen carbon atoms, or a combination thereof;

n is an integer ranging from 1 to 18;

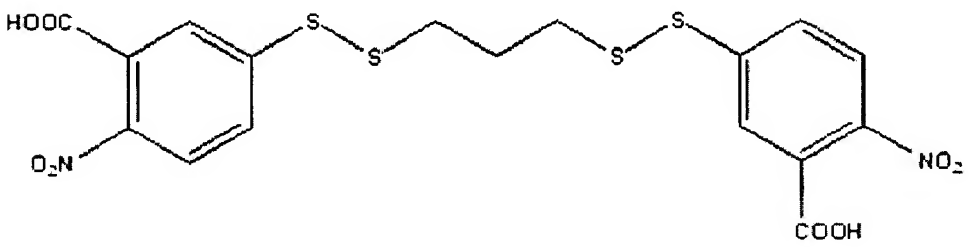
S is a sulfur atom; and

Aryl is a phenyl radical or an ortho-fused bicyclic radical having about nine to ten ring atoms wherein at least one ring is aromatic and wherein each Aryl moiety is substituted with at least one reactive group that can form a covalent linkage with an amino acid.

3. (Original) The proteinoid microsphere of Claim 2 wherein the reactive group that can form a covalent linkage with an amino acid is carboxylate, nitro, amino or sulfhydryl.

4. (Original) The proteinoid microsphere of Claim 2 wherein the reactive group that can form a covalent linkage with an amino acid is a carboxylate group.

5. (Original) A proteinoid microsphere comprising a mixture of amino acids that are thermally condensed and crosslinked with a crosslinker reagent of formula VII:



6. (Original) A therapeutic composition comprising a therapeutic agent encapsulated within a proteinoid microsphere comprising a mixture of amino acids that are thermally condensed and crosslinked with a crosslinker that can form a pore upon exposure to a reducing agent.

7. (Original) A therapeutic composition comprising a therapeutic agent encapsulated within a proteinoid microsphere that comprises a mixture of amino acids that are thermally condensed and crosslinked with a crosslinker of any one of formulae I-VI.

COOH—S—S—$(CH_2)_n$—S—S—COOH	I
COOH—S—S—X—S—S—COOH	II
NH_2—S—S—$(CH_2)_n$—S—S—NH_2	III
NH_2—S—S—X—S—S—NH_2	IV
Aryl—S—S—$(CH_2)_n$—S—S—Aryl	V
Aryl—S—S—X—S—S—Aryl	VI

wherein:

X is a spacer group of about approximately 3 to 100 angstroms by about 2 to 30 angstroms that comprises an alkane chain, an alkene chain, a cycloalkyl or aryl ring having five to fourteen carbon atoms, or a combination thereof;

n is an integer ranging from 1 to 18;

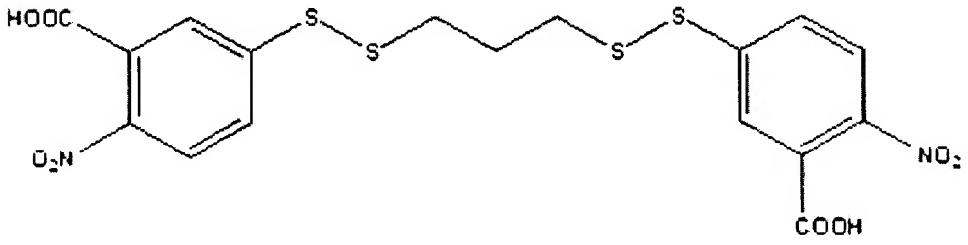
S is a sulfur atom; and

Aryl is a phenyl radical or an ortho-fused bicyclic radical having about nine to ten ring atoms wherein at least one ring is aromatic and wherein each Aryl moiety is substituted with at least one reactive group that can form a covalent linkage with an amino acid.

8. (Original) The therapeutic composition of Claim 7 wherein the reactive group that can form a covalent linkage with an amino acid is carboxylate, nitro, amino or sulfhydryl.

9. (Original) The therapeutic composition of Claim 7 wherein the reactive group that can form a covalent linkage with an amino acid is a carboxylate group.

10. (Original) A therapeutic composition comprising a therapeutic agent encapsulated within a mixture of amino acids that are thermally condensed and crosslinked with a crosslinker reagent of formula VII:



11. (Original) An article for wound treatment comprising a therapeutic agent encapsulated within a proteinoid microsphere comprising a mixture of amino acids that are thermally condensed and crosslinked with a crosslinker that can form a pore upon exposure to a reducing agent.

12. (Original) An article for wound treatment comprising a therapeutic agent encapsulated within a proteinoid microsphere that comprises a mixture of amino acids that are thermally condensed and crosslinked with a crosslinker of any one of the formulae I-VI.

$COOH—S—S—(CH_2)_n—S—S—COOH$	I
$COOH—S—S—X—S—S—COOH$	II
$NH_2—S—S—(CH_2)_n—S—S—NH_2$	III
$NH_2—S—S—X—S—S—NH_2$	IV
$Aryl—S—S—(CH_2)_n—S—S—Aryl$	V
$Aryl—S—S—X—S—S—Aryl$	VI

wherein:

X is a spacer group of about approximately 3 to 100 angstroms by about 2 to 30 angstroms that comprises an alkane chain, an alkene chain, a cycloalkyl or aryl ring having five to fourteen carbon atoms, or a combination thereof;

n is an integer ranging from 1 to 18;

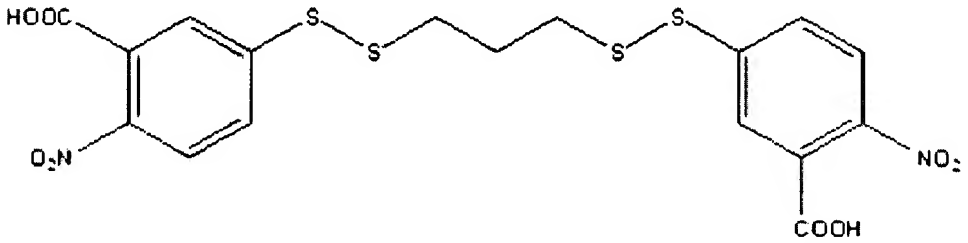
S is a sulfur atom; and

Aryl is a phenyl radical or an ortho-fused bicyclic radical having about nine to ten ring atoms wherein at least one ring is aromatic and wherein each Aryl moiety is substituted with at least one reactive group that can form a covalent linkage with an amino acid.

13. (Original) The article of Claim 12 wherein the reactive group that can form a covalent linkage with an amino acid is carboxylate, nitro, amino or sulfhydryl.

14. (Original) The article of Claim 12 wherein the reactive group that can form a covalent linkage with an amino acid is a carboxylate group.

15. (Original) An article for wound treatment comprising a therapeutic agent encapsulated within a mixture of amino acids that are thermally condensed and crosslinked with a crosslinker reagent of formula VII:



16. (Withdrawn) A method of releasing a therapeutic agent from a proteinoid microsphere comprising contacting a reducing agent with a therapeutic agent encapsulated with a proteinoid microsphere comprising a mixture of amino acids that are thermally condensed and crosslinked with a crosslinker of any one of the formulae I-VI.

$COOH—S—S—(CH_2)_n—S—S—COOH$	I
$COOH—S—S—X—S—S—COOH$	II
$NH_2—S—S—(CH_2)_n—S—S—NH_2$	III
$NH_2—S—S—X—S—S—NH_2$	IV
$Aryl—S—S—(CH_2)_n—S—S—Aryl$	V
$Aryl—S—S—X—S—S—Aryl$	VI

wherein:

X is a spacer group of about approximately 3 to 100 angstroms by about 2 to 30 angstroms that comprises an alkane chain, an alkene chain, a cycloalkyl or aryl ring having five to fourteen carbon atoms, or a combination thereof;

n is an integer ranging from 1 to 18;

S is a sulfur atom; and

Aryl is a phenyl radical or an ortho-fused bicyclic radical having about nine to ten ring atoms wherein at least one ring is aromatic and wherein each Aryl moiety is substituted with at least one reactive group that can form a covalent linkage with an amino acid.

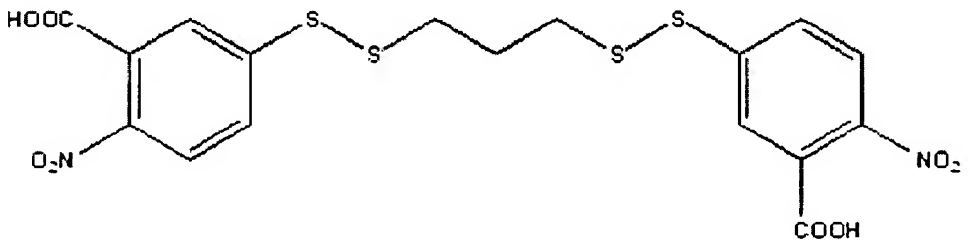
17. (Withdrawn) The method of Claim 16 wherein the reactive group that can form a covalent linkage with an amino acid is carboxylate, nitro, amino or sulfhydryl.

18. (Withdrawn) The method of Claim 16 wherein the reactive group that can form a covalent linkage with an amino acid is a carboxylate group.

19. (Withdrawn) The method of claim 16 wherein the therapeutic agent is released from the proteinoid microsphere into a wound.

20. (Withdrawn) The method of claim 19 wherein the wound is a chronic wound.

21. (Withdrawn) A method of releasing a therapeutic agent from a proteinoid microsphere comprising contacting a reducing agent with a therapeutic agent encapsulated with a proteinoid microsphere comprising a mixture of amino acids that are thermally condensed and crosslinked with a crosslinker reagent of formula VII:



22. (Withdrawn) The method of claim 21 wherein the therapeutic agent is released from the proteinoid microsphere into a wound.

23. (Withdrawn) The method of claim 22 wherein the wound is a chronic wound.

24. (Withdrawn) A method of sustained release of a therapeutic agent into the bloodstream of a mammal comprising administering a therapeutic agent encapsulated within a proteinoid microsphere to a mammal, wherein the proteinoid microsphere comprises a mixture of amino acids that are thermally condensed and crosslinked with a crosslinker of any one of the formulae I-VI.

COOH— S—S— $(CH_2)_n$—S—S—COOH	I
COOH— S—S— X—S—S—COOH	II
NH_2— S—S— $(CH_2)_n$—S—S— NH_2	III
NH_2— S—S— X—S—S— NH_2	IV
Aryl — S—S— $(CH_2)_n$—S—S—Aryl	V
Aryl — S—S— X—S—S—Aryl	VI

wherein:

X is a spacer group of about approximately 3 to 100 angstroms by about 2 to 30 angstroms that comprises an alkane chain, an alkene chain, a cycloalkyl or aryl ring having five to fourteen carbon atoms, or a combination thereof;

n is an integer ranging from 1 to 18;

S is a sulfur atom; and

Aryl is a phenyl radical or an ortho-fused bicyclic radical having about nine to ten ring atoms wherein at least one ring is aromatic and wherein each Aryl moiety is substituted with at least one reactive group that can form a covalent linkage with an amino acid.

25. (Withdrawn) The method of claim 24 wherein the reactive group that can form a covalent linkage with an amino acid is carboxylate, nitro, amino or sulfhydryl.

26. (Withdrawn) The method of claim 24 wherein the reactive group that can form a covalent linkage with an amino acid is a carboxylate group.

27. (Withdrawn) A method of sustained release of a therapeutic agent into the bloodstream of a mammal comprising administering a therapeutic agent encapsulated with a proteinoid microsphere to a mammal, wherein the proteinoid microsphere comprises a mixture of amino acids that are thermally condensed and crosslinked with a crosslinker reagent of formula VII: